UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

MF

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/547,191	04/11/00	NORI A	50277-0370.

TM02/0326

HICKMAN PALERMO TRUONG & BECKER LLP
1600 WILLOW STREET
SAN JOSE CA 95125-5106

EXAMINER	
COLBERT, E	
ART UNIT	**PAPER NUMBER**
2172	8

DATE MAILED: 03/26/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/547,191	Applicant(s) NORI ET AL.	
	Examiner Ella Colbert	Art Unit 2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 January 2001* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
18) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other: .

DETAILED ACTION

Response to Amendment

1. This action is responsive to communications: Amendment A, filed on 1/19/01, entered as paper number 7.

2. Claims 1-24 are pending. Claims 1, 7, 16, 19, 20, and 24 are independent claims. Claims 7, 16, 19, and 24 have been amended.

3. Applicants' claim objection for claims 1-24 not commencing on a separate sheet of paper has been overcome with Applicants' amendment and is hereby withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoover et al (US 5,560,005), hereafter Hoover.

With respect to claims 1, 16, 20, and 24, reading data from one or more rows of a set of one or more tables (**column 54, lines 31-40**), and presenting data from one or more rows as an object with an object id (**column 49, lines 54-59**). Hoover did not teach, generating an object id based on values from one or more rows, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have one or more rows and to generate an object id based on values from the

one or more rows because a relational database consists of tables of rows and columns that define a relationship between things in each row including one or more object attributes employed by users to identify object instances. Hoover did not teach a processor or a memory coupled to a processor, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a processor with the memory coupled to the processor to implement the steps of claims 1 and 16 because the processor controls the computer and the memory is the space within the computer where information is stored while actively being worked on.

With respect to claims 2, 17, and 21, generating an object id based on values includes generating an object id based on values from one or more rows of a rational table belonging to a set of one or more tables (**column 29, lines 39-59**).

With respect to claim 3, generating a reference to an object id ... (**column 53, in lines 49-58**).

With respect to claim 4, accessing the object based on the reference generated ... (**column 53, lines 23-37 and lines 59-67 and column 57, lines 28-35**).

With respect to claims 5, 18, and 22, receiving a request to define a view, the request specifying one or more columns of the set of tables containing values ... (**column 26, lines 63-67, column 27, lines 1-23, column 28, lines 18-29 and column 35, lines 56-63**), in response ... storing specification data that specifying one or more columns (**column 15, lines 4-28 and column 39, lines 54-60**). Hoover did not teach, generating an object id based on values from one or more rows including determining how to generate the object id ..., but it would have been obvious to one having ordinary skill in the art of object generation at the time the invention was made to have one or more rows and to generate the object id by inspecting the specification data because

each object id is unique and identifies the object with which it is associated which contains data used to locate the object.

With respect to claims 6 and 23, Hoover did not teach, receiving a request to define a view including receiving a request specifying one or more columns including a column from a relational table, but it would have been obvious to one having ordinary skill in the art of defining a view at the time the invention was made to specify one or more columns from a relational table because a database server manages relational tables which define data structures or data types managed by the database server and a view of the data is presented to a user of objects of the object types in a database.

With respect to claims 7, 8, and 19, reading a first set of data from the fields of the set of one or more tables (**column 6, lines 40-56**), the fields includes a field from each of the rows (**column 15, lines 1-18**), generating a column object based on a first set of data (**column 25, lines 44-57**), and presenting a second set of data from a set of one or more tables ... (**column 41, lines 44-67**). Hoover does not explicitly teach, the object has a column object as an attribute, but it would have been obvious to one having ordinary skill in the art at the time the invention was made for the object to have a column object as an attribute because a column is identified as a "row" and divides the fields into rows in a table with the field mapped to a corresponding object attribute. Hoover further teaches in claim 8, reading data from one or more rows includes the rows being read from a relational table (**column 17, lines 4-31**) and in claim 19, one or more databases (**column 6, lines 41-49**) and one or more tables contained in the databases (**column 18, lines 9-16**). In claim 19, Hoover did not teach a processor or a memory coupled to a processor, or the processor configured to read a set of data from the fields but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a processor with the memory coupled to the

processor to implement the steps of claim 19 because the processor controls the computer and the memory is the space within the computer where information is stored while actively being worked on.

With respect to claims 9 and 10, Hoover did not teach, generating a collection object includes generating a collection object as a list of elements belonging to a single data type or generating a column object including a collection object, but it would have been obvious to one having ordinary skill in the art of object generation at the time the invention was made to have a list of elements because each row has a value and each column identifies an object type such as a person or a child attribute of the object type which can be a collection data type and represent one or more children of a person.

With respect to claim 11, Hoover did not teach, generating a collection object includes generating a collection object as a nested table, but it would have been obvious to one having ordinary skill in the art of collection object generation at the time the invention was made to generate a collection object as a nested table because the data types within an object table enable the modeling of one to many relationships.

With respect to claim 12, generating a column object includes generating a column object belonging to a user specified object type (**column 20, lines 10-38 and column 42, lines 6-13**).

With respect to claim 13, generating a column object includes generating a column object with a reference to another object (**column 42, lines 49-60**).

With respect to claim 14, generating a column object includes generating a column object with a reference to an object presented by an object view (**column 42, lines 61-67 and column 43, lines 1-6**).

With respect to claim 15, generating a column object includes generating a reference to an object residing in a database (**column 14, lines 60-67 and column 43, lines 41-56**).

Response to Arguments

6. Applicant's arguments filed 1/19/01 have been fully considered but they are not persuasive.

With respect to Applicants' argument concerning "the Office Action failed to provide any reason why it would be obvious to form this combination, despite having formed it by combining a step that had been inferred from general knowledge with a reference that teaches a fundamentally different technique for creating object identifiers" is not persuasive based on the motivation has been provided in the because statement and a suggestion/ motivation need not be expressly stated in one or all of the references used to show obviousness. *Cable Electric Products, Inc. v. Genmark, Inc.*, 770 F.2d 1015, 1025, 226 USPQ 881, 886 (Fed. Cir. 1985); *In re Sheckler*, 438 F.2d 999, 1001, 168 USPQ 716, 717 (CCPA 1971). It is assumed that every reference relies to some extent on the knowledge of persons skilled in the art to complement that which is disclosed therein. Further, the skilled artisan is presumed to know something more about the art than only what is disclosed in the applied reference. In other words, the person having ordinary skill in the art has a level of knowledge apart from the content of the references. *In re Bode*, 550 F.2d 656, 660, 193 USPQ 12, 16 (CCPA 1977); *In re Jacoby*, 309 F.2d 513, 516, 135 USPQ 317, 319 (CCPA 1962). A conclusion of obviousness is established "from common knowledge and common sense of the person

of ordinary skill in the art without any specific hint or suggestion in a particular reference." *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

With respect to Applicants' arguments concerning the Hoover reference neither describes nor suggests all of the elements of claim 1 has been fully considered but deemed not persuasive because in this rejection of claim 1 and others, for example under Section 103 (a) of Title 35 of the United States Code, the Examiner carefully drew up a correspondence between the Applicants' claimed limitations and one or more referenced passages in the Hoover reference, what is well known in the art, and what is known to one having ordinary skill in the art (the skilled artisan). The Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the Specification (see below):

2111 Claim Interpretation; Broadest Reasonable Interpretation [R-1]

>CLAIMS MUST BE GIVEN THEIR BROADEST REASONABLE INTERPRETATION

During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).<

With respect to Applicants' argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a

reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

With respect to Applicants' argument " the Office Action Examiner has provided no proper showing that there was a motivation to combine these references is discussed above.

With respect to Applicants' argument "Hoover does not discuss "presenting column objects as attributes of another object," let alone generating such a column object based data from a field of a row. Therefore, Hoover cannot possibly disclose or suggest in any way presenting data as objects that have as an attribute, a column object, where the column object is based on a plurality of fields from a plurality of rows" is not persuasive because the Examiner cannot find where Applicants' claims recite the claim limitations "presenting column objects as attributes of another object" and "where the column object is based on a plurality of fields from a plurality of rows."

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Genus*, 988 F.d. 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Owens et al (US 6,047,284) taught a relational database and an object-oriented environment with objects and database tables.

Boyer et al (US 5,778,355) taught a object-oriented database with retrieving data members and related members from a collection of data.

(703)308-9051, (for formal communications intended for entry).

Or:

(703)308-5403 (for informal or draft communications, please label **"PROPOSED"** or **"DRAFT"**).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, Virginia., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (703)308-9600.

Colbert
March 23, 2001

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

US 095471910AP1

Creation date: 07-17-2004
Indexing Officer: TBARIBOR - TUKA BARIBOR
Team: OIPEBackFileIndexing
Dossier: 09547191

Legal Date: 05-21-2001

No.	Doccode	Number of pages
1	A...	3
2	REM	14

Total number of pages: 17

Remarks:

Order of re-scan issued on .....